

Amendments to the Claims:

The following listing the claims replaces all previous listings and versions of the claims in this application.

Listing of the Claims:

1. (Currently Amended) ~~Single-step~~ A process for the preparation of lower α -alkene polymerization heterogeneous solid catalyst, comprising mixing an organomagnesium precursor derived procatalyst having ~~comprising~~ magnesium chloride supported titanium chloride and an internal electron donor with ~~[[and]]~~ an organoaluminum compound based cocatalyst~~[[,]]~~;

wherein the mole ratio of aluminum in the cocatalyst to titanium in the procatalyst is 10 – 3000 : 1, and the procatalyst is obtained by single step reaction of the organomagnesium precursor ~~[[and]]~~ with titanium tetrahalide or titanium haloalkoxo species of the formula $Ti(OR)_m X_n$, wherein R is selected from the group consisting of methyl, ethyl, normal propyl, isopropyl, normal butyl, and isobutyl, X is selected from the group consisting of chlorine and bromine, and $m + n = 4$ with the condition that when $m = 1$ to 4, $n = 3$ to 0 respectively, with a hydrocarbon or halohydrocarbon solvent and internal electron donor and optionally an acid halide under microwave irradiation of 300 to 1200 W followed by isolating the procatalyst, the mole ratio of the organomagnesium precursor to the titanium tetrachloride or titanium haloalko species being 1 : 6 to 1 : 20 and the mole ratios of the electron donor and acid halide to titanium being 0.3 to 1.5 and 0.02 to 0.2, respectively.

2. (Currently Amended) ~~Single-step~~ The process as claimed in claim 1, wherein the organomagnesium precursor is magnesium ethoxide.

3. (Currently Amended) ~~Single-step~~ The process as claimed in claim 1, wherein the mole ratio of the organomagnesium precursor to the titanium tetrachloride or titanium haloalkoxo species is 1:13.

4. (Currently Amended) ~~Single-step~~ The process as claimed in claim 1, wherein the titanium tetrahalide is titanium tetrachloride.

5. (Currently Amended) ~~Single-step~~ The process as claimed in claim 1, wherein the mole ratio of aluminum in the cocatalyst to titanium in the procatalyst is 200 : 1.

6. (Currently Amended) ~~Single-step~~ The process as claimed in claim 1, wherein the solvent is chlorobenzene.

7. (Currently Amended) ~~Single-step~~ The process as claimed in claim 1, wherein the microwave radiation of 300 W is applied.

8. (Currently Amended) ~~Single-step~~ The process as claimed in claim 1, wherein the aluminum compound is triethyl aluminum.

9. (Currently Amended) ~~Single-step~~ The process as claimed in claim 1, wherein the molar ratios of the electron donor and acid halide, if any, to titanium are 0.7 and 0.07 respectively.

10. (Currently Amended) ~~Single-step~~ The process as claimed in claim 1, wherein the electron donor is selected from the group consisting of ethyl benzoate, dibutyl and diisobutyl phthalate.

11. (Currently Amended) ~~Single-step~~ The process as claimed in claim 1, wherein the acid halide is benzoyl chloride.

12. (Canceled)

13. (Currently Amended) ~~Single-step~~ A process for the preparation of polypropylene polymerization heterogeneous solid catalyst, comprising mixing an organomagnesium precursor derived procatalyst ~~comprising~~ having magnesium chloride supported titanium chloride and an internal electron donor with ~~[[and]]~~ an aluminum compound based cocatalyst and a selectivity control agent~~[[,]]~~;

wherein the mole ratio of aluminum in the cocatalyst to titanium in the procatalyst is 10 – 3000 : 1 and the mole ratio of selectivity control agent to titanium is 10 – 100 : 1; and the procatalyst is obtained by single step reaction of organomagnesium precursor and titanium tetrahalide or titanium haloalkoxo species of the formula $Ti(OR)_m X_n$, wherein R is selected from the group consisting of methyl, ethyl, normal propyl, isopropyl, normal butyl, and isobutyl, X is selected from the group consisting of chlorine and bromine, $m = 0$ and $n = 4$ with a hydrocarbon or haloalkoxo solvent and an internal electron donor and optionally an acid halide under microwave irradiation of 300 to 1200 W followed by isolating the procatalyst, the mole ratio of the organomagnesium precursor to the titanium tetrachloride or titanium haloalkoxo species being 1 : 6 to 1 : 20 and the mole ratios of the electron donor and acid halide to titanium being 0.3 to 1.5 and 0.02 to 0.2 respectively.

14. (Currently Amended) ~~Single-step~~ The process as claimed in claim 13, wherein the organomagnesium precursor is magnesium ethoxide.

15. (Currently Amended) ~~Single-step~~ The process as claimed in claim 13, wherein the mole ratio of the organomagnesium precursor to the titanium tetrachloride or titanium haloalkoxo species is 1 : 13.

16. . (Currently Amended) ~~Single-step~~ The process as claimed in claim 13, wherein the titanium tetrahalide is titanium tetrachloride.

17. . (Currently Amended) ~~Single-step~~ The process as claimed in claim 13, wherein the mole ratio of aluminum in the cocatalyst to titanium in the procatalyst is 200 : 1.

18. . (Currently Amended) ~~Single-step~~ The process as claimed in claim 13, wherein the solvent is chlorobenzene.

19. (Currently Amended) ~~Single-step~~ The process as claimed in claim 13, wherein the microwave radiation of 300 W is applied.

20. (Currently Amended) ~~Single-step~~ The process as claimed in claim 13, wherein the organoaluminum compound is triethyl aluminum.

21. (Currently Amended) ~~Single-step~~ The process as claimed in claim 13, wherein the selectivity control agent is selected from the group consisting of p-ethoxy ethyl benzoate, dicyclohexyl dimethoxy silane and diphenyl dimethoxy silane.

22. (Currently Amended) ~~Single-step~~ The process as claimed in claim 13, wherein the mole ratio of the selectivity control agent to titanium is 10 –75 : 1.

23. (Currently Amended) ~~Single-step~~ The process as claimed in claim 13, wherein the molar ratios of electron donor and acid halide, if any to titanium are 0.7 and 0.07, respectively.

24. (Currently Amended) ~~Single-step~~ The process as claimed in claim 13, wherein the electron donor is selected from the group consisting of ethyl benzoate, dibutyl phthalate, and diisobutyl phthalate.

25. (Currently Amended) ~~Single-step~~ The process as claimed in claim 13, wherein the acid halide is benzoyl chloride.

26. (Canceled)

27. (Canceled)